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09/913,725	08/17/2001	Shigeru Yano	018793-251	3808

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EXAMINER
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VO, HAI

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/913,725  
Filing Date: August 17, 2001  
Appellant(s): YANO ET AL.

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George F. Lesmes  
For Appellant

**EXAMINER'S ANSWER**

**MAILED**

NOV 02 2005

**GROUP 1700**

This is in response to the appeal brief filed 06/18/2004 appealing from the Office  
action mailed 01/30/2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,284,828

TAKAYAMA

09-2001

Translation of JP 11-158305, Yano et al, "Porous Film and Its Manufacturing Method," 38 pages, June 15, 1999.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-158305 as evidenced by Takayama (US 6,284,828).

In response to the Order Remanding, a copy of a complete and accurate verified English language translation of the JP 11-158305 is provided to Appellants as an attachment. The page numbers referred to below correspond to those of the English translation of the Japanese Patent JP 11-158305. JP'305 discloses a porous film being formed from a resin composition containing (A) 25 to 50 parts by weight of polyolefin resin that includes 75 to 98 wt% of linear low density polyethylene and 2 to 25 wt% of branched low density polyethylene and (B) 75 to 50 parts by weight of an inorganic filler and 0.5 to 10 parts by weight of a lubricant (claim 1). JP'305 teaches the porous film having the moisture vapor transmission, uniformity of thickness, and thickness meeting the specific ranges required by the claims (page 18, [0025]). JP'305 does not specifically disclose a liquid ethylene-alpha-olefin oligomer having been used as a lubricant in the resin composition. Takayama teaches a polyacetal resin composition comprising a polyacetal resin, a polyolefin resin, an inorganic filler and a lubricant that includes a liquid ethylene-alpha-olefin oligomer and ethylenebissteramide in the amount of 0.5 to 5 parts by weight based on 100 parts by weight of the resin composition. The lubricant is used for improved dispersibility and processability of the composition (abstract, column 5, lines 31-35, column 8, lines 10-15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use

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the ethylene-alpha-olefin oligomer singly or in combination with the ethylenebissteramide disclosed in JP'305 motivated by the desire to obtain the porous film with improved dispersibility and processability and thereby facilitating the preparation of the film. This is important to the expectation of successfully practicing the invention of JP'305 and thus suggesting the modification.

It appears that Takayama and Appellants use the liquid ethylene-alpha-olefin oligomer as a lubricant; therefore, it is the examiner's position that the viscosity of the ethylene-alpha-olefin oligomer would be substantially, inherently present. Like material has like property. Products of identical chemical composition can not have mutually exclusive properties. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990). The porous film of JP'035 as modified by Takayama is produced by the same process and formed from the same resins having composition similar to that of the present invention. The porous film has the moisture vapor transmission, thickness and uniformness of thickness meeting the specific ranges required by the claims. Thus, it is not seen that the porous film would have performed differently than that of the present invention in terms of the ratio of the rigidity to the thickness and the ratio of the extrudation start time to the thickness so as to enable the film to meet the moisture vapor transmission, thickness and uniformness of thickness as recited in the claims.

#### **(10) Response to Argument**

Appellants argued that there is a lack of motivation in the cited prior art to combine the teachings thereof to achieve the present invention. Appellants asserts that there is nothing in Takayama '828 which suggests that the presence of the lubricant has

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any beneficial effects on the polyolefin resin component of the present invention. The examiner disagrees for the following reasons. The lubricants in Takayama '828 are designed not only to improve of friction and abrasion resistance of molded polyacetal resin compositions as argued by Appellants but also to improve the disperability, molding processabilities of the composition (abstract, column 5, line 28). This is exactly the solution to problems with which the JP'305 reference is concerned. Takayama teaches a polyacetal resin composition comprising a polyacetal resin, a polyolefin resin, an inorganic filler and a lubricant that includes a liquid ethylene-alpha-olefin oligomer and ethylenebissteramide in the amount of 0.5 to 5 parts by weight based on 100 parts by weight of the resin composition (abstract). The lubricant is used for improved dispersibility and processability of the composition (abstract, column 5, lines 23-32, and column 8, lines 10-15). This demonstrates that this lubricant is functional in compositions containing polyolefins. Given that JP'305 employs a lubricant, substitution of an improved variety does not seem impractical. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the ethylene-alpha-olefin oligomer singly or in combination with the ethylenebissteramide disclosed in JP'305 motivated by the desire to obtain the porous film with improved dispersibility and processability and thereby facilitating the preparation of the film. It appears that the molded product disclosed in the JP'305 reference has a composition similar to the composition of the Takayama invention. Both compositions comprise a polyolefin resin, an inorganic filler and a lubricant. The Takayama reference discloses the use of the liquid ethylene-alpha-olefin oligomer to

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facilitate the preparation and the processability of the molded composition. The polyolefin resin was used with a small amount in the polyacetal resin composition as pointed out by Applicant. However, it is noted that the reference disclosure evidences that polyolefin resin is compatible with liquid ethylene-alpha-olefin oligomer.

Accordingly, there are no reasons why such a lubricant could not have been used in combination with the porous polyolefin film for the improvement of the disperability and processability of the film. In addition, it appears that the ethylenebissteramide of the JP'305 reference is a lubricant and the oligomer of the Takayama reference is also a lubricant. Both references evidence that such lubricants are known to be used in the polyolefin containing compositions and as such, substitution of a known lubricant for another known lubricant for the purpose conventionally associated with the lubricant is considered within the level of skill in the art.

Appellants argue that the Office fails to conclude that evidence in the specification that the presently claimed invention provides unexpected results. Appellants argue that when the ethylene alpha-olefin oligomer was used as a lubricant in examples 1-7, the uniformness of thickness of the porous film ranged from 0.06 to 0.1. On the other hand, when the liquid paraffin (a lubricant disclosed as suitable by Takayama '828) was used as a lubricant in comparative example 6, the uniformness of thickness of the porous film is 0.16. The arguments are not found persuasive for patentability because they are not commensurate in scope with the claims. The liquid paraffin used in comparative example 6 of the present invention causes the porous film having a uniformness of thickness of 0.16 which is close to the upper limit (0.15) of the claimed

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range set out in claim 1. There is no significant difference between two values 0.15 vs. 0.16 to the examiner. Thus, the substitution of liquid paraffin for the ethylene alpha-olefin oligomer does not significantly impact the physical properties of the porous film in terms of the uniformness of thickness. Appellants further argues that in Comparative example 1, castor oil as a conventional ester lubricant was used and the porous film made therefrom had a moisture permeability, uniformness and ratio ( $S_H/T_H$ ) of rigidity relative to thickness of the porous film within the claimed range. However, ratio ( $T_S/T_H$ ) and ratio ( $T_E/T_H$ ) relative to exudation resistance were outside the claimed range and overall evaluation of the porous film was unsatisfactory. The arguments are not found persuasive for patentability since they are irrelevant to the basis of the art rejections that was made by the examiner. Appellants fail to show that the use of the ethylene alpha-olefin oligomer apparently provides technical advantage or improvement over other lubricants in attaining the requisite properties desired in porous polyolefin films of **JP '305**. Additionally, nothing specific about the ratio ( $T_S/T_H$ ) and ratio ( $T_E/T_H$ ) relative to exudation resistance is included in claim 1. Further, the examiner directs Appellants to Comparative example 3 of the present specification, the use of the ethylene alpha-olefin oligomer apparently does not provide technical advantage or improvement over other lubricants in attaining the desired moisture permeability of the porous film. Similarly, as shown in Comparative example 7 of the present specification, the use of the ethylene alpha-olefin oligomer apparently does not provide technical advantage or improvement over other lubricants in attaining the desired uniformness of thickness of the porous film. Accordingly, the examiner maintains that in the absence of unexpected results,



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substitution of a known lubricant for another known lubricant for the purpose conventionally associated with the lubricant is considered within the level of skill in the art.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted, 

**HA VO**  
**PRIMARY EXAMINER**

Conferees:

Terrel Morris, SPE 1771 — 

Deborah Jones, SPE 1775 